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## Ontario Department of Education

# Midsummer Examinations 1921 and 1922

## REPORTS OF EXAMINERS

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## PREFATORY NOTE

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From the year 1915 to the year 1920, inclusive, the reports of the Associate Examiners for the Midsummer Departmental and Matriculation Examinations have been printed by the Department for distribution to the teachers of the secondary schools. The reports of the Examiners in 1921 were not printed at that time, as it was considered that such reports might be more effective if published only in alternate years. Accordingly, the Minister has now authorized the publication of the reports of the Examiners for the two years, 1921 and 1922, and these reports are transmitted herewith, without comment, to the teachers for their consideration.

As in previous years, it is assumed that copies of the question papers to which references are made in the reports will be found in the schools. The surplus supply of the copies of these question papers has been transferred by the Department to the office of "The School," The College of Education, corner of Bloor and Huron Streets, Toronto. Copies may be purchased on application to that office.





# Midsummer Examinations 1921 and 1922

## REPORTS OF EXAMINERS

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### THE CONDUCT OF THE EXAMINATIONS

The teachers of classes and all who act as presiding officers at the departmental midsummer examinations are advised to read carefully the first two sections of the report on the midsummer examinations of 1920. Many of the points to which attention is called therein have been again emphasized by the associate examiners in their reports in 1921 and 1922. They urge that pupils be given more training in the exact interpretation of questions and in methods of answering them. Pupils should be taught on the one hand to answer all that a question calls for and on the other to omit irrelevant details. Parts of questions should be answered as parts and not all parts in one paragraph. Greater attention should be paid to the form of the answers, to the correct numbering and proper arrangement of the answers, including the rough work, to proper paragraph division and to the leaving of a reasonable space between questions. In many cases errors resulted from a lack of neatness.

Some of the sections of examiners call attention to weaknesses in the use of English, to the very limited vocabularies of some candidates, to faulty grammatical constructions, and to the inability of many to express their answers in simple language that would convey the correct meaning. Several of the sections also complain of carelessness in the spelling of common words. In this connection the attention of all teachers is directed to the fact that henceforth at all the Lower, Middle and Upper School examinations marks are to be deducted for errors in spelling. See section 8 (2), page 91, of the High School Courses of Study and Examinations, 1922. In the reports of the examiners under English, appearing below, further reference will be found to some of these points.

### THE TEACHING OF THE SUBJECTS

#### ENGLISH

Last year it was recommended that greater attention be given to the metrical form as an aid to correct lining. This point was evidently overlooked, for faulty lining was again a very common error. In some cases where the wording was correctly written, two-thirds of the marks assigned were deducted for incorrect lining.

In some cases the subjects were not correctly interpreted by the candidates. In the case of the subject, "The reflections of the school-room clock," some wrote, "Reflections *on* a school-room clock,"

Lower School,  
Literature,  
1921.]

Composi-  
tion, 1921.



while others showed that they did not understand what was meant by reflections. Candidates should be warned not to choose subjects that they do not clearly understand.

The absence of real description was again noticeable, especially in the case of the subjects, "An excursion party" and "Incidents of a trip on a boat." And, in these two subjects, many candidates devoted several pages to introduction and conclusion, while two or three short paragraphs contained all that was written on the subject chosen.

The punctuation throughout was poor.

More attention should be paid to sentence structure. Participial phrases and adjective clauses were frequently misplaced and sometimes punctuated as sentences.

There was frequent repetition of such slang expressions as, "He sure did it."

Composition,  
1922.

In many cases the essays gave little evidence of originality. Some candidates did not attempt the debate at all while others did it poorly. Except in a few cases there was little idea of logical argument. Statements or numbered points frequently took the place of argumentative composition. The introductory part of the debate was not well done and the form of the debate was poor. In many cases the subject of the debate was not explained and there was neither logical arrangement of material nor concluding summary. The attention of the teachers is drawn to the following points in general:

1. Punctuation was sometimes neglected.
2. The spelling was inaccurate. Mistakes in the spelling of simple words such as,—to, too; of, off; were, where; and in the use of the apostrophe were not uncommon.
3. Adjectival forms were used instead of adverbial forms; e.g., "He swims good." Tenses were poorly formed. "For to" was used repeatedly as in "for to go."
4. In style, very few papers rose above the commonplace. Trite forms of expression were common, such as, "The day broke bright and clear," "We arrived at our destination," "We arose early and prepared lunch," "We arrived home tired, but happy."

Grammar,  
1922.

While there was a marked improvement in the answers to the question on analysis, attention may be drawn to the following points:

1. Clauses should be written in full.
2. Many candidates did not classify adverb clauses, and the treatment of clauses of purpose and comparison was particularly weak.
3. "Modifying" not "relating to" is the correct term to indicate the relationship of adjectival or adverbial clauses; also, such clauses modify some word or words in a clause, not a whole clause.

In the questions on parsing the candidates frequently confused the significance of the terms "meaning" and "use." The term "use" should be interpreted as grammatical value or function.

Subordinate conjunctions "relate" their clause to some word or words in another part of the sentence; the terms "join" and "introduce" should be avoided in this connection.



The question on transitive verbs was badly answered. The majority of the candidates apparently did not know that a passive verb may be transitive.

The questions on forms in "ing," on objects, on verb phrases and on the history of the language were well answered.

In the matter of memory work, the marks lost were chiefly due to incorrect lining. This, in some cases at least, was accounted for by a lack of appreciation of rhythm in poetry on the part of the pupil.

Middle  
School.  
Literature,  
1921.

In spelling the following errors were quite common:—"angle" for "angel"; "speach" for "speech"; "alright" for "all right"; "choose" for "chose"; "loose" for "lose"; "led" for "lead." Little attention, too, seems to have been given by many pupils to the correct spelling of proper names contained in the authors read.

Sentences were sometimes left incomplete, while in other cases they were not indicated by the use of a capital letter and a period.

This year the answer papers of 80% of the candidates showed considerable improvement over those of the preceding year. This was particularly noticeable in locating passages from the prescribed work, in greater precision in giving the meaning of words, and also in the memory work, although, as was shown here, many candidates still lack an appreciation of rhythm and have little understanding of metre, especially in "Shakespeare." Further improvement in all the points referred to is very desirable. The following suggestions are offered:

Literature,  
1922.

1. It would seem advisable to give more time to exact explanations of words and phrases, to the writing in proper sentence form of concise answers to questions of different kinds, to teaching pupils to read questions carefully and to avoid diffuseness in answering. Again and again, in locating passages, candidates wrote a great deal more than was necessary; and they often failed to give the important point in connection with the answer.

2. A great deal remains to be done before the spelling of common English words can be regarded as satisfactory. Words such as occasion, isle, affect, effect, alter, altogether, speech, scene, prophecy, prophesy, speak, assassination, all right, were often written incorrectly. Familiar proper names from the texts, such as Ulysses, Philippi and Locksley, were also frequently misspelled. Little attention was given to the use of capital letters and quotation marks. Not infrequently candidates failed to begin a line of poetry with a capital letter.

3. Pupils should be taught to avoid the use of slang expressions and unauthorized abbreviations. They should also be reminded that marks are given for the style of the answer, and that careful sentence structure and correct punctuation in answering questions in literature are as important as they are in writing a composition.

4. More time might be given to teaching the common figures of speech. At least 50% of the candidates failed to explain satisfactorily, "get the start of" and "bear the palm."



The cause for the failure of nearly all the candidates in this subject was faulty sentence structure and lack of proper paragraphing. There were other defects, but these were of primary importance. We would strongly urge teachers to place more emphasis on these points.

Several cases were found where the essay was not on the topic. Two may be mentioned. One composition concerning the Duke of Wellington, was about a dog that was given that name; and the other, on the same topic, was a story of a Chinese boy named the Duke of Wellington. We would recommend that teachers impress on pupils more strongly the fact that they must write directly on the topics.

A pronounced immaturity was very evident in a great many essays, due, we think, to the fact that so many candidates were writing a year and, in some cases, two years earlier than usual.

Teachers should remember that the required length of the essay is about two pages.

The penmanship was exceptionally bad this year. We would urge teachers to discourage pupils from the use of unusual styles of penmanship.

A great many essays showed a lack of good reading on the part of candidates. These essays were improbable and sentimental. Judicious guidance and supervision of the supplementary reading by the teacher is the obvious remedy.

The examiners noted the slovenly English and bad spelling of many candidates. Some obtained pass marks on their knowledge and appreciation of the assigned work, but failed because of deductions for incorrect spelling and false syntax. Under the latter heading were included faulty sentence structure, lack of agreement between verb and subject, the use of such expressions as "had of," "different than," "if it was" instead of "if it were," and of unauthorized abstract nouns in "ness," such as "knowingness." The very bad spelling on several series of papers indicated that in a number of schools the pupils are not trained in the proper attitude towards the subject. Their carelessness was shown by the fact that the expression on the examination paper "excellences of Morte d'Arthur" became in their hands "excellencies of Morte d'Arthur." In view of this unsatisfactory state of affairs under the present regulations, the examiners wish to draw the attention of the teachers to the fact that under the new regulations each teacher in each department is required to pay special attention to the teaching of the spelling of words that occur in connection with his subject. Only through the co-operation of all can the desired results be obtained.

The most noticeable feature of the Upper School Literature results this year was the very small number of candidates who secured First or even Second Class Honour standing. The most glaring defects in the answer papers were the poor spelling and sentence structure. In some answer papers as many as twenty errors in spelling were noted. Whole answers on some papers were written as one sentence and whole papers without any punctuation. The tabulation of answers still occurs as does the failure to number questions and subdivisions of questions.



In the matter of the content of the answers some points need special emphasis:

- (a) Memory work is much too valuable to be neglected;
- (b) Illustrations or definite references should be given in answering "critical" questions, mere quotations from notes or lectures being of little value;
- (c) In "locating" passages precision should be observed. Some candidates do not show clearly enough the connection with the immediately preceding context. Others write far too much, some practically outlining the whole poem or act

Many of the essays show defective development of thought, and a lack of effective arrangement of matter. The natural inference would be that the laws of paragraph structure, particularly those relating to unity, continuity and proportion, have not been sufficiently stressed.

Composition, 1921.

With regard to sentence structure there are three outstanding defects:—the use, throughout an essay, of sentences so short as to produce an effect of extreme crudity, the crowding into one sentence of a number of little independent statements, with or without connection, sometimes joined merely by commas, and the use of long sentences so loosely constructed that no clear idea emerges.

Relatively few essays were graded first class. This was not owing especially to defects in style, but rather to paucity of ideas. Many essays had to be graded a bare pass because of the entire lack of idea or the insertion of commonplace, hackneyed material.

It is matter for congratulation that the writing, on the whole, was neat and legible, and that the errors in spelling and syntax were few.

While there was a higher percentage of excellent essays, the examination on the whole revealed a greater amount of poor work than last year—work careless in execution, weak in mechanical structure, and immature in thought. Bad spelling, incorrect sentences, and faulty paragraphing are the errors the teachers of English should endeavour to correct. The co-operation of teachers of all subjects is necessary. Other weaknesses were:

Composition, 1922.

- (1) A tendency to take a very extreme or narrow view of a theme.
- (2) A desire to fill the work with trivial details and uninteresting matter.
- (3) A proneness to wander away from the theme selected.

The value of a clear, simple, natural style cannot be over-emphasized.

## HISTORY

The candidates' answers were of about the same average quality as those of last year. There were fewer examples of glaring errors but, on the other hand, there were fewer very good papers. The examiners were pleased to note the general absence of tabulated answers and of memorized notes. However, there are still serious defects in the candidates' answers. Greater use should be made of maps as the pupils frequently showed utter ignorance of the location of places mentioned. Teachers seem to have gone to the extreme in

Lower School.  
Br. and Can.  
History,  
1921.



not requiring knowledge of dates. Very often the candidate had no idea of the historical setting of an incident which he otherwise described correctly.

Canadian  
History,  
1922.

On the whole the subject of Canadian History seems to be carefully taught. The best papers of this year compare very favourably with the best of last year. The chief defects in the answers of the candidates who failed were an immaturity of thought and a certain vagueness in the answers which are no doubt due to the youth of these candidates. This vagueness was particularly evident in the answers to the questions on Civics and on the Great War. Greater attention should be paid to the teaching of the stories of the lives of great Canadians. Many of the candidates who failed showed little knowledge of such men as Mowat, Ryerson and Brown. This aspect of history is easily made interesting to young students.

Middle  
School.  
Ancient His-  
tory, 1921.

The answers were generally good, showing effective teaching, and intelligent preparation on the part of the candidates.

The attention of teachers is directed to the importance attached to the question on the location of places specified and to the stating of an historical event connected therewith. In many cases candidates wrote at undue length on these events thus leaving themselves insufficient time for the other questions. A short answer of four to six lines is sufficient to indicate definite knowledge of the event asked for by the examiner.

Ancient His-  
tory, 1922.

From the answers of the candidates in Middle School Ancient History the examiners this year infer that the geography of Greece and Italy has received very little attention in the schools. Many candidates could not locate places like Marathon and Thermopylae.

The examiners are also forced to the conclusion that Ancient History is not receiving sufficient time in the schools. Candidates obtained most of their marks on the Greek History, which was probably taught first and, although the questions on the Roman History were the easier, the answers were much poorer, indicating that the work had been hurriedly prepared.

British and  
Canadian  
History, 1921

The candidates in their answers showed much ignorance of the geographical background of the history, the location of places being very inaccurate.

Outline answers were not so numerous as in former years, but are still used by some students. Teachers should warn their pupils against giving such answers. It would appear that there are still some teachers of History who spend their time in dictating notes to their students to be copied and memorized. This is about the surest way to kill any interest that a boy or girl may have in History.

Some of the answers showed that considerable reading was done outside the text book, but these were in the minority. There was also some evidence of a lack of outside reading and thorough familiarity with the subject on the part of teachers. Teachers of History should read as widely as possible and should encourage research work on the part of the students. Attention should be given to the building up of a good school library. Many of the candidates' answers were not



well expressed. History can easily be correlated with composition, pupils being required to write essays or exercises dealing with historical subjects.

The answers to the question on Civics show the need for more extended and thorough study of that subject.

In conclusion, the section would urge upon all teachers of History the need of doing something more to inculcate in their students a knowledge of the progress and development of both England and Canada, and also to train them to appreciate the significance of historical events.

It is the impression of the section that careful work in British History is being done in the schools, though there were cases where apparently students wrote without preparation. The following suggestions are offered:

British History, 1922.

(1) Candidates should be warned against giving incomplete or careless answers when locating places. Instead of writing "Corunna is in Spain where Moore fought the French," they should be directed to give some such adequate answer as, "Corunna is on the north-west coast of Spain. Here Sir John Moore, after a masterful retreat from the interior, gave battle to the French and defeated them. Moore was killed but the British were able to embark safely."

Constant class-room use of maps might overcome the tendency of candidates to confuse east and west.

(2) The students without a knowledge of significant dates suffered in question 3. Many gave 1763 as the year in which the American colonies were lost, although that was the first year of the period prescribed for study.

(3) The discussion of the causes of the Crimean War and of the Congress of Berlin showed excellent preparation by some schools. To supply a European background for such material is essential.

(4) Much material not found in the prescribed text was given by candidates, especially in the question on Disraeli. This was commendable, but in such answers a lack of perspective sometimes was evident, the student spending his time on striking trivialities and passing lightly over events of outstanding importance.

It would seem that there are still many schools in which no attention is paid by teachers of Upper School History to the geography relating to the period studied. For example, a lamentable ignorance of the extent of the Roman Empire was shown.

Upper School History, 1921.

Many candidates had a hazy conception of the social life of the Middle Ages. Often no distinction was drawn between vassals, serfs or slaves. Possibly this subject is not sufficiently elucidated in the texts in common use.

Candidates are again advised that before writing out their answers, they should jot down on an unruled page the points they wish to develop. Such a plan would encourage clearer thinking and eliminate needlessly long introductions.

Many candidates showed little knowledge of colonial expansion. It would appear that more attention should be paid to the teaching of this important phase of modern history.



The answers were, as a rule, creditable, but sufficient attention, apparently, is not given to the location of places.

Outside reading should be encouraged by assigning a choice of three or four biographies; e.g., Chatham, Gladstone, Palmerston, Napoleon, Cavour, Garibaldi, or students might be required to read, in addition to the text book, "Modern England," 1789-1914, by Sydney Herbert, (Macmillan & Co.), a useful book.

Lack of analysis was evident in the answers of many candidates. Some, however, were excellent.

In many cases questions were not grappled with directly. Too many candidates snatch a point out of a question here and there and have no real knowledge of the problem as a whole.

Teachers should strive to establish a comprehension of the relations between geography and history.

### CLASSICS.

The general character of the answers was distinctly good. This is probably accounted for by the fact that in many schools only the best scholars elected to try Latin. Some schools, however, showed a lack of preparation which resulted in many failures. Teachers hereafter will probably cover more work in the first year class and this should improve the quality of the answers. The examiners call attention to the following points:

(1) In the grammar part of the question paper, (a) the answers to the question on the principal parts of the verb and the participles and infinitives gave evidence of a lack of drill, (b) the ablative of the third declension adjective was frequently written incorrectly; candidates did not write the letters *e* and *i* clearly.

(2) The composition part of the question paper was particularly well answered, in many cases better than the grammar part. The word order, however, was often poor. Few knew the difference between "relinquo" and "discedo" as a translation for "leave." Many did not seem to know that "ad" and "ab" with "pervenio" and "discedo," respectively, were prepositions and, accordingly, should be placed before the noun. Few could use correctly the perfect participle of the deponent verb.

(3) The translation into English was not well done and showed that many teachers had neglected the reading lessons. The English used was very poor and little effort was made to work out a reasonable translation.

The translation of the Caesar was for the most part satisfactory.

There was considerable variation shown in the degree of preparation of Virgil. Students should be encouraged to study the syntax more carefully and to make independent translations. The answers to the questions on syntax indicated that teachers should aim to make students more familiar with the ordinary grammatical relations.

The handling of the sight translation was one of the more satisfactory features of the candidates' work this year.

Generally speaking, the defects noted above would be largely removed if pupils spent longer time in the preparation of their work.



Some candidates seemed to think that "audiens hoc" properly translates "on hearing this," that "in Galliam" and "in Britanniam" mean "in Gaul" and "in Britain," that "ex castra" means "from the camp" and that "omnes" is in proper agreement with "oppida."

Latin Composition,  
1921.

Many of even the best candidates showed ignorance of the declension of pronouns, the sequence of tenses, the conditional clauses, and particularly the periphrastic conjugations, while the many remarkable attempts to translate "westward," "without Caesar's knowledge" and "in accordance with Caesar's commands," showed the need of drill in the expression in Latin of idiomatic English phrases.

Candidates should be trained in the careful reading of questions. Many candidates lost marks by giving a case, number, or voice other than that asked for. Candidates should be instructed too, to try every question. The Latin paper was not too long for the time allotted and yet many candidates failed, or did not obtain as high marks as they might, through failure to attempt all the questions.

The character of the candidates' answers was about the same as last year. Many unsuccessful candidates would have passed if they had known their grammatical forms and applied the simple rules of agreement. In some schools there has evidently been no thorough review of grammatical forms. Many candidates also have little or no knowledge of the pronouns, conditional sentences, the hortatory subjunctive, the passive periphrastic and the impersonal passive. In view of the higher standard required the associate examiners think that the examination in Middle School Latin should not be attempted without four years' preparation.

Latin Composition,  
1922.

The examiners found a marked improvement in the quality of sight translation in the candidates' answers. On the other hand, the Caesar selected was so poorly translated as to convince the examiners that many candidates had not prepared the Caesar at all. There was marked weakness in the answers to the grammar questions as well as in the translation.

Upper School.  
Classics,  
1922.

The reading of the Composition papers showed the necessity of more thorough drill on the elementary work in Latin. Without that, progress is impossible. The weakness of the candidates in syntax was also marked, particularly in the following:—sequence of tenses, the use of the preposition "in," indefinite pronouns, the subjunctive mood, "alius" and "alter," the recognition of the infinitive as a mood.

## MATHEMATICS.

It is evident that candidates are not familiar with problems of a general and practical nature. More time should be given to these and less to the stereotyped forms.

Lower School.  
Arithmetic,  
1921.

Candidates show a lack of ability in squaring and in extracting the square root of mixed numbers.

Prior to the examination teachers of Arithmetic should fully instruct all candidates, *re* the handling of rough work, stressing the following points:

(a) Rough work when applied to Arithmetic refers to mechanical operations such as multiplication, etc. Much time is lost by the duplication of solutions in rough.



(b) *All* such rough work should be shown and, as far as possible, on the blank page directly opposite the solution.

Arithmetic,  
1922.

In view of the evident immaturity of the candidates and of their inability to understand the meaning of the transactions mentioned in the problems, the section recommended that Arithmetic be taken as a second year subject.

Candidates frequently misplaced or disregarded the decimal point; e.g.,  $\frac{16285.50 \times 2}{231} = 14100$  instead of  $141.00$ ,  $\frac{3}{200}$  of  $17250 = 25,875$  instead of  $258.75$ , and  $.30$  cents for  $\$.30$ . More attention should be paid to work in decimals, especially in the division of decimals.

In problem 2 better results were obtained from the ratio method than from the unit method of solution.

The compound interest problem was badly handled; many worked in days, some even allowing "days of grace."

In problem 4 the use of 100 per cent. as list price nearly always led to error.

A lack of knowledge of the ordinary tables and formulae was quite evident.

Diagrams were not always used in the mensuration problems.

Algebra,  
1921.

In most cases, the questions in Algebra were answered more satisfactorily than those in Geometry.

Whilst there has been considerable improvement in factoring, there is still much uncertainty in dealing with the negative sign before fractions and brackets.

Geometry,  
1921.

In the Geometry, very many candidates omitted the particular enunciation either in whole or in part. Also, many failed to refer in any way to previous propositions necessary to the establishment of the proof.

There was a good deal of confusion in the parallel construction as to the proper transversal to be associated with any particular angle.

On the whole, the practical Geometry was well handled.

Geometry,  
1922.

A majority of the candidates did not know how to handle an indirect proof satisfactorily. Teachers might well spend more time in drilling on propositions admitting of indirect proof.

Middle  
School.  
Algebra,  
1921.

The candidates' methods of dealing with fractional indices and their solutions of problems, show an improvement over those of last year. Mistakes, however, still occur:

- (1) In the use of brackets,
- (2) In the use of the sign of equality (omitting it where it should be put in, and putting it in where it should be omitted),
- (3) In the use of the minus sign before a fraction with more than one term in the numerator,
- (4) In the solution of simultaneous quadratic equations, and
- (5) In the failure to distinguish an expression from an equation.

On the whole, the examiners are well satisfied with the answers made by the candidates, and infer that the subject is, in general, well taught in the secondary schools of the province.



Apart from an insufficient knowledge of the subject, the most common cause of failure was a lack of accuracy in dealing with algebraic signs and in making arithmetical calculations. Very many did not know the order of precedence of the operative signs.

Algebra,  
1922.

The very poor answers on indices would seem to indicate that, in the hurry to get over the course by the end of the third High School year, some of the later parts of the course of study were not thoroughly taught.

Usually the attempt to solve a problem that offered any difficulties was unsuccessful, and the last problem was no exception to the general rule. Very many confused the units and had one side of the equation expressed in dollars and the other in cents. More attention should be given to the solution of problems.

More attention should be given to practical constructions as in question 1. Many candidates failed to show the necessary construction lines, while others did not grasp the idea of the question but inserted a triangle similar to a supposed given one.

Geometry,  
1922.

The answers to question 4, the ambiguous case of congruent triangles, showed, on the whole, careful work, but in too many cases the additional construction was confused with that of theorem 17, and this confusion led to the rejection of the candidate's answer.

The answers to the three exercises, one problem and two theorems, showed that the candidates were consciously aiming to arrive at a conclusion by successive steps in reasoning, which, after all, appears to be to the chief advantage of geometrical teaching.

The Trigonometry section found that the answers for the different questions indicated that the work had been well and carefully taught. The students seemed to find most difficulty in properly reading and using the tables and in operating with the negative characteristic.

Upper School.  
Trigonometry,  
1921.

In the theoretical proofs, students did not seem to be able to grasp the proof for  $\sin(A-B)$ , etc., by the projection method as well as by the ordinary geometric proof.

In a few cases, solutions were not given in so neat and concise a form as one would expect from Upper School students. They should be impressed with the fact that it is distinctly to their advantage to have their rough work and calculations in good form so that these may be readily inspected.

The most noticeable weakness in Trigonometry was found in the use of tables. Many could not use them correctly, and others who could use them were unsystematic and careless in the arrangement of the figures.

Trigonometry,  
1922.

In Algebra, the use of general formulae in solving the examples in permutations (No. 3), and debentures (No.12) was uniformly unsuccessful.

Algebra,  
1922.

Accurate drawing of the diagrams, as shown in the case of question No. 1, should be insisted upon.

Geometry,  
1921.

Wrongly lettering the figures, so as not to correspond with what the candidates write in many cases (as for example question No. 4), caused much trouble in reading the answer paper.



The work of the candidates on question No. 1 indicated that exercises on the Middle School Geometry had not been given sufficient attention.

Many candidates had not learned to distinguish the *equation* for a straight line, from the *expression* for a line segment.

Geometry,  
1922.

In Geometry the diagrams and proofs should be on the same page to obviate the danger of error on the part of the candidates and to facilitate the examiner's work. When the proof extends over to a second page, the diagram should be repeated.

## SCIENCE

Lower School.  
Geography,  
1921.

A general weakness was shown in the description of surface features, because of lack of system and inability to distinguish the leading features from the less important. By the use of relief maps the picture of the main highlands and drainage slopes can be impressed upon the memory, and these greater features should be given first place in any description.

In the description of industries, frequently only the general name of the industry was given, without specific examples of the products. The leading products of each industry in order of importance should be taught.

In the sketch of the map of the Great Lakes and connecting waters, a large percentage of the candidates knew practically nothing of the relative position, size or shape of the bodies of water. Evidently this phase of map work has been totally neglected in many schools.

The student should not only be able to locate important features and places on a given outline map; but he should be able to sketch from memory the outlines of the continents, the more important countries, and great axial and drainage systems. Intelligent practice of map drawing from memory gives a clearer picture of the form and proportion of the areas studied.

In some cases the teaching of atmospheric deposits had not been scientific; aqueous vapour in relation to saturation or dew point not appearing in the answers.

The inequality of day and night at the solstices as depending on the inclination of the earth's axis to the plane of its orbit had not been so clearly taught as it should have been.

In teaching such subjects as "The Great Terrestrial Winds" or "Ocean Currents" it is well to make clear their influence on the climate of specific countries.

Geography,  
1922.

The separation of Commercial from Physical Geography seems to have led to better work in Commercial Geography.

Agriculture,  
1922.

Both papers in Agriculture were, on the whole, well answered this year. Apparently the subject is becoming more experimental and, as a consequence, the students are understanding it. This was indicated by the comprehensiveness of the answers to such questions as the hotbed, bees, grafting, pasteurization, germination.



In the study of fungi, the syllabus calls for three saprophytic forms, not one of three; many teachers have taught the mushroom intensively and the puffball and polypore with much less detail or not at all. Again in the study of fern a few teachers are taking up the alternation of generation which is not required and at the same time are not taking up the microscopic features in sufficient detail.

Elementary  
Science,  
1921.

The indefiniteness in many of the answers about the cat skeleton revealed the need of more careful laboratory observation in this part of the work.

The following call for more attention:

The terms function and adaptation, saprophyte and parasite.

The distinction between seed and spore.

The function of stored food in plants.

The meaning of the term "life history."

The importance of atmospheric pressure in the action of the pump and the significance of Archimedes' Principle in the action of the hydrometer.

The poles of a voltaic cell.

The spelling of scientific terms.

The development of the power to make drawings which show structural detail clearly.

The power to give a scientific report of an experiment with apparatus properly assembled, procedure properly carried out, observations clearly given and conclusion logically drawn.

In general the answers bore evidence of good work on the part of the teachers of the Province.

Botany,  
1922.

In some cases too much attention has been given to the textbook, and too little to the examination of plants; this was seen in question 1, on the description of plants and in question 6, on the cross-section of branch. Some schools have done too much and too difficult work on the microscopic structure.

The practical study of the four plants of which a detailed study is prescribed should be stressed; and larger, more numerous and more accurate diagrams should be required.

The term "fruit" did not seem to be well understood and many could not distinguish between "pericarp" and "seed."

In some instances teachers have used unsuitable experiments. In the question on osmosis for example, the pupils who used other experiments than the egg experiment or the thistle-tube and membrane experiment did not seem to have so good a grasp of the subject.

The general character of the answers was very good but attention is called to the following points:

Zoology,  
1922.

(1) Many of the candidates' answers indicated a lack of personal observation of the prescribed specimens.

(2) In many cases pupils failed to understand clearly the adaptation of the form of the specimen to its manner of life.

Many answer papers showed a lack of correlation between the two branches of the subject; questions on Physics were well answered in many cases while those on Physical Geography were scarcely attempted and vice versa. Often candidates understood the con-

Physiogra-  
phy, 1922.



struction of the barometer, but could not give its uses in forecasting weather and in determining altitude. A considerable number were able to give an experiment illustrating convection but failed to apply the results in explaining the movements of the atmosphere. And some students were able to give elaborate experiments to prove that water vapour and carbon dioxide are present in the air without being able to show the part they play in weathering.

The answers to the question regarding the heat of fusion indicated that in many schools the mathematical side of the subject is being stressed. Some candidates attempted to give exact weights and temperatures, but failed to grasp the main fact that, although heat is absorbed as ice melts, the temperature remains stationary.

Questions calling for definitions were on the whole poorly answered showing the necessity of more attention being given to concise accurate statements of generalizations.

*Note.—Teachers of Physiography who desire hand-specimens of the rocks mentioned in the syllabus may obtain them by writing to the Director of the Geological Survey, Ottawa, and paying the freight charges.*

Some schools are still insisting on memorizing solutions and formulae for solutions in photometry and calorimetry. One group of candidates gave the same figures to illustrate specific heat and in many of the general formulae where they used  $m$ ,  $t$ , etc., the pupils became hopelessly confused.

In *sound* very few could give clear definitions of transverse and longitudinal waves. Vibrations seem to have been stressed and waves neglected. Important incidentals were often overlooked; for example, in 2 (b) the necessity for insulating the bell from the plate or bell-jar; and in 1(b), in beats, the fact that the forks must be of nearly the same vibration number.

In *light*, the drawing of images seemed to be very mechanical and great confusion existed in distinguishing between mirrors and lenses and between convex and concave forms. More intelligent drill on the formation of images is needed.

In answering the question on the induction coil, while most candidates gave a good description of the structure and working of the primary coil and the make and break, the structure and action of the secondary coil were neglected or treated unsatisfactorily. The fact that the induction coil is used to produce alternating or pulsating currents of high electromotive-force was rarely mentioned, and the work on the condenser was equally faulty. This is probably due to the fact that the practical applications of the coil have not been properly stressed. In the case of all apparatus, the practical application should be emphasized.

Certain things are not being clearly explained and sufficiently stressed; e.g., the difference between E.M.F. and current strength, pitch and loudness, virtual and real images, north and south poles of a magnet, positive and negative plates and poles.

Pupils should be taught in dealing with construction and action of apparatus to give first, a drawing; second, an accurate and complete verbal description; and third, the action and use.



Many students appeared to be unable to distinguish between an illustration and an experiment and, in describing experiments, the proper sequence of observation and conclusion was not followed; e.g., "the liquid expands and rises in the tube," instead of "the liquid rises in the tube showing that it has expanded."

Physics,  
1922.

Lenses and mirrors were often confused and the images were drawn in a mechanical way. Arrows should be placed on all rays of light in order to keep the meaning of the lines before the pupils.

In teaching the spectrum, more emphasis should be placed on the diagram showing the path of the light through the prism. Very few students were able to define complementary colours.

In connection with photometry, the terms "illuminating power" and "intensity of illumination" were confused. The student should be taught the law of inverse squares and then led by non-algebraic methods to see that the illuminating powers are proportional to the squares of the distances.

The arithmetical work in the numerical examples was poorly done in many cases.

More care should be taken to make students realize the difference between vibrations and waves.

In teaching the storage cell the essential points in Article 492, O.H.S. Physics, should be stressed. Many pupils lost sight of the essentials and contributed only an incoherent mass of detail concerning red lead and litharge.

In general the section considered that the subject had been well taught and that any shortcomings in teaching were due mainly to too little time being devoted to Physics on the school time-table.

Candidates' answers indicated a decided lack of knowledge of meanings of terms used in Chemistry. A large percentage lacked precision in explanation of radicle and valency.

Chemistry,  
1921.

In answering the question, "describe experiments," many candidates made a mere statement of some observation. Teachers should make it clear to pupils that such a question cannot be answered without a statement of apparatus and materials used and procedure as well as observations.

The candidates' answers showed that the subject is being well taught. In reading the answers to question 1, in which the candidates were asked to separate the description from the drawing, we found that they were being taught both to give a verbal description of apparatus and to make careful drawings. There has been marked improvement in the drawing of apparatus.

Chemistry,  
1922.

In question 4, candidates were asked for the method of collecting gases. Many spent much time describing the preparation of these gases. Teachers should emphasize the distinction between such words as "preparation" and "collection," as used in Chemistry. More attention should be paid to the meaning and spelling of such words as "anaesthetic" and "antiseptic," and the spelling of words in constant use in Chemistry, such as "soluble" and "separate."



Upper School.  
Botany and  
Zoology,  
1921.

Bad spelling of technical terms seems to indicate that not sufficient attention is paid to this by the teachers.

The same might be said about the very loose use of plural and singular of technical terms.

The incompleteness of many answers seems to indicate that not sufficient actual practical work is done by the pupils or that written descriptions of this practical work are very incomplete.

Naming the parts of a plant or animal is not a description of these parts.

Biology,  
1922.

The average mark this year in both Botany and Zoology is the lowest in many years. The explanation seems to be insufficient preparation on the part of the candidates. We believe that sufficient time is not given to teachers to cover adequately the course and to review it.

The answers showed certain types of defect that have been noted in previous years. Effort is wasted because the candidate has not read the question carefully. For instance, in question 5 of the Botany paper many candidates wrote on all the factors influencing the growth of plants, whereas, the question asked only for those influencing the directions of growth of roots and stems. A large proportion of the candidates gave a **very** inadequate reply when a description was required. In the question on the mouth-parts of arthropods a mere list of names was commonly offered as a description. The low average of the marks obtained was a feature of the examination, one made all the more noticeable by the occasional high marks obtained by a few candidates. The cause of low marks in the great majority of cases lay not in the candidate giving misinformation, but in the incompleteness of his answers. The same type of incompleteness occurring in several consecutive sets of answers suggests that it is a matter of teaching rather than of lack of ability in the candidates. The marks obtained by successive groups of candidates would also suggest this.

Chemistry,  
1921.

In the answer papers of the Upper School Chemistry it was evident that an accurate knowledge of chemical terms was lacking. The number of terms used in Chemistry is so limited that there is little excuse for an Upper School student showing inability to define these terms exactly or to make proper application of them. It was also evident that more attention should be given to the writing of chemical equations. Those asked for were such as students of the Upper School should be able to give readily. The knowledge of the relations expressed by a chemical equation as shown in the solution of problems was generally satisfactory. On the other hand the limited application of equations in expressing chemical phenomena was apparently not realized, as in many instances equations were written as a substitute for observations on experiments. In describing the preparation of chemical substances modern standard methods should be adhered to rather than those which have an historic or purely theoretical interest. Teachers should realize that the Middle School Chemistry is the foundation for successful work in the Upper School.



Considering the higher standard for passing, a large proportion of the candidates were not sufficiently prepared for the examination. A lack of personal experience of laboratory operations, of the manipulation of apparatus and of the chemical processes involved, was shown by some candidates. The use of either Smith's Intermediate Chemistry or MacPherson and Henderson's Elementary Chemistry is recommended.

Chemistry,  
1922.

It is apparent that some teachers are not taking sufficient cognizance of the fact that the character of the course has been altered in respect to the reduction in the amount of the mathematical work required and the corresponding increase in the experimental work. In many cases question 3 was answered by giving a geometrical construction and proof whereas an experimental proof was required.

Physics,  
1921.

From the answers to questions involving the description of experiments, it was evident that there had been neglect either in the performing of the experiments or in recording descriptions of them, as there was frequently failure to make proper deductions through reasoning based on observations. A failure to understand the units of measurement was apparent and this was especially evident where solutions of problems involving these units were attempted.

The answers sometimes showed a lack of knowledge of ordinary arithmetical operations such as the placing of the decimal point, the meaning of per cent., the correct use of units of length, area and volume. Failure to make intelligent statements was evidently due to inaccurate knowledge of physical units and consequent confusion in the attempt to use them. The effectiveness of the teaching of the subject might be improved by insisting always on the pupils giving concise and accurate statements showing the sequence of the reasoning in the solution of problems and the drawing of conclusions from experiments.

Physics,  
1922.

## ART

In spite of specific instructions as to size and placing, many candidates made diminutive drawings, or placed their drawings very carelessly on the page. These faults can be eliminated by more careful instruction by the teacher.

Lower School.  
Art, 1921.

The question on pencil drawing in outline has shown the need (1) of paying more careful attention to form independent of tone, (2) of giving more careful training in the drawing of clear lines of good quality, particularly of the accented and unaccented line. Increased attention should be given to free-hand perspective. Many candidates made the common mistake of drawing each object of a group with a different eye-level.

There has been a very marked advance in the expression of good taste on the part of the candidates at this examination. This is especially noticeable in the answers to the questions on design.

Lettering has shown steady improvement, this year's being exceptionally good.

Unusual skill was exhibited by many candidates in adapting nature motifs to purposes of applied design and in making balanced and rhythmic arrangements of units for the uses specified in the



questions. This was noticeable in the many excellent menu covers, table centre-pieces, and teapot tiles submitted as answers to question 2.

On the other hand, groups of answer papers gave abundant proof that the teaching of applied art is almost neglected in some schools.

There is a marked improvement in the laying on of colour washes, and in the use of harmonious tones in design; but it was evident that the study of colour had been neglected in some centres. Many candidates omitted colour altogether; others used glaring colours or a black and white scheme.

Frequently flat washes were used in the representation of the tree, the bird, and the head of the horse or the dog required by one of the questions.

Pupils should be warned not to attempt to paint, from memory, objects which they had never studied before, either in the class under the instruction of a teacher or by themselves. Many such failed to produce worth-while drawings of the apple-tree in flower (or fruit), the robin, the horse's head, or the dog's head.

The majority of the candidates this year showed a finer appreciation of the artistic qualities of a picture.

Many, however, did not understand, or failed to express clearly, the difference between eye-level and skyline, and between background and foreground; very few had any idea of the meaning of the term "perspective depth."

Art, 1922.

The answers of the candidates writing on Lower School Art continue to show very great improvement in every department of the subject.

The examiners would commend to the careful consideration of the teachers of art the following suggestions:

The simpler principles of elementary perspective should receive careful and constant attention. Many candidates failed to show convergence and foreshortening in drawing the objects of the group in answer to question 1, and failed to appreciate the value of perspective in the picture study of question 4.

Greater attention should be given to the consistent expression of light and shade and shadow.

Tone drawings should not be marred by the retention of strong outline, neither should they be rendered untidy by smudging, or by the use of a stump.

Problems in design should be expressed in the flat. Designs based on geometric forms should not be neglected.

Lettering of a standard character should continue to receive careful teaching and persistent practice.

A colour scheme should possess suitability to the purpose for which it is required; the harmony should be carefully chosen and the colours should rarely be intense.

The mixing of mediums, for example, pencil and water colours, should be discouraged. Students should be taught that white and black are not colours, and that Chinese white should not be used on white paper.



Memory tests should be frequent in connection with the drawing of common, and not too difficult, objects previously drawn or frequently seen.

The figure drawing and landscape drawing, so interesting when done by children of the first grade and the second grade of the Public School, become caricatures when executed by children of the Lower School. Such illustrations, for example, for posters, should be discouraged on the part of all but the most gifted in this kind of drawing. But as far as circumstances permit, the children with talent for figure drawing and for landscape drawing should be encouraged and assisted.

Children should be taught to discover in pictures those characteristics of arrangement, perspective, tone values, and lighting which they are taught to practice in their own drawings.

## MODERNS

While we have pleasure in recording an improvement over last year, we recommend more attention to the study of verbs, particularly as to the formation of their principal parts, and as to the translation of the various tenses.

Middle  
School.  
French  
Authors,  
1922.

The answers to the French Composition paper show that the work was, on the whole, well taught in the majority of schools. The following suggestions, however, may be helpful to teachers:

French  
Composi-  
tion, 1921.

More attention should be given to the teaching of the proper use of the tenses. In sentences which are clearly conversational the past definite was commonly found where, of course, the past indefinite should have been used. In many cases the imperfect tense was found throughout the continuous prose even when referring to a single definite action.

The conditional sentences were poorly done. More time and attention should apparently be devoted to the teaching of conditional sentences.

Many marks were lost through an incorrect use of the various forms of demonstrative pronouns and adjectives. The correct form of "celui," "celui-là," and "ce" was seldom found.

The position of short adverbs in compound tenses such as "bien," "déjà," "jamais" should be emphasized. Many marks were lost because candidates said "vous avez travaillé bien" and "a-t-elle été jamais en Angleterre," etc., instead of putting the adverb in its proper position between the auxiliary and the past participle.

There is still a great deal of carelessness on the part of pupils. Failure to make adjectives agree with the noun and to elide was altogether too common. Teachers should insist on accuracy in the class-room work.

Many pupils showed a lamentable lack of vocabulary. The French Reader should be used to help pupils to acquire an extensive vocabulary.

Many marks were lost because candidates gave alternative instructions (one of which was wrong), without indicating which construction was to be taken. Teachers should be careful to instruct pupils to indicate clearly, when alternative instructions are given, which one is to be accepted.



The associate examiners find an improvement in the French vocabulary of the candidates and in their translation of the continuous prose. This is doubtless due, in part, to the method now adopted of basing the continuous prose on the passages in the Reader.

They draw attention again, however, to the necessity for emphasis on the following points in teaching:

(1) The verb—the translation of the English verb-phrases, e.g., “he is reading, etc.”—the use of auxiliary verbs—the use of the tenses, especially the past definite and the past indefinite—the use of the future after “quand”—the use of the second singular and the second plural of reflexive verbs.

(2) The pronoun object, its position when used with a compound tense, and the distinction between direct and indirect objects.

(3) The proper use of “rien.”

(4) The position of the adjective.

(5) The translation of dates.

(6) Spelling and the accurate use of the hyphen and the apostrophe.

The most gratifying feature of the candidates' answers this year was the evident improvement in the character of the translations. Increased ability was shown in the rendering of German into equivalent idiomatic English. This is important, in view of the benefits to be derived from accurate translation in increasing a sadly lacking precision of speech and counteracting the prevailing slovenliness.

Care must be taken, however, to avoid too free translation. The literal translation, with its German word order, etc., retained, was not very much in evidence. Stress should still be laid on oral work.

The outstanding feature of the answers was the apparent failure of a very large proportion of candidates to appreciate English idiom, and the meaning of English words. Expressions constantly mis-translated which illustrate this fact were “rather dear,” “will you have,” “how much shall I cut off,” “I had to go to the doctor.”

The compound tenses should be stressed more, and the use of “sein” as auxiliary. The use of the modals was in general satisfactory.

Probably seventy per cent. of the candidates, or more, translated “prefer” by “haben gern besser.”

In general the quality of work, as shown in the answers, seems to show improvement over that shown on last year's paper.

The answers to questions on the Authors paper indicated that the improvement in translation into good English idiom, noted in this report last year, has continued. There is still a tendency, especially in translating poetry, to follow too literally the word order of the original. There seemed to be an improvement in the knowledge of verb forms.

The answers to questions on the Composition paper did not seem to show such satisfactory progress in the teaching of the subject. It was evident that in certain schools, as shown by definite groups of papers, the subject was not given sufficient attention to produce good results. The associate examiners believe that more practice should be given in the translating into German of continuous prose passages.



The answers of the candidates in Upper School French Authors again emphasized the need of training in the use of idiomatic English.

Upper School  
French  
Authors,  
1921.

Such expressions as, "which of we two," "the almost certainty," "three alternatives," "declare war to" instead of "on" or "against" were very common. The examiners are sorry to report that there was more ungrammatical and slangy English than last year. The spelling and punctuation were particularly poor. The translation of exclamations, such as "morbleu," "par exemple," and of nouns and adjectives of nationality, such as "écossais," "le midi," was not good. Such idioms as "me suis je fait tirer l'oreille," were too often translated literally. There was a decided tendency to translate such words as "ignore," "doute," "attention," "franchise," "agréable," "brave," "exploit," by the words in English which they most closely resemble.

There was a general failure to distinguish between "qui" and "que," "ne-que" and "ne-pas," and the two meanings of "aussi."

With these exceptions the majority of the papers showed a careful preparation of the prescribed work and an improvement in the ability to translate French at sight.

The answers on the last chapters of "L'Homme à l'Oreille Cassée" were a gratifying proof that most candidates had read the whole story.

Evidently students have had insufficient practice in the sight translation of poetry. Students should be impressed with the fact that,—

French  
Authors,  
1922.

(1) A translation can be free and at the same time accurate.

(2) No translation can be good, which is not expressed in good English. The following are typical errors,

I would have liked to have given.

I had the satisfaction to save the life.

I returned, the heart more satisfied.

To give them my money with some pincers.

There was noticeable improvement in the use of the past definite, past indefinite and imperfect tenses in the passage of connected prose. There is still need, however, of special drill in the use of these tenses.

French  
Composition,  
1921.

There was lack of knowledge of the use of the subjunctive. A great many candidates used the subjunctive in any kind of dependent clause.

The government of the following verbs was not clearly understood: regarder, répondre, s'adresser, penser, rire, se souvenir, compter.

The following expressions were too frequently confused: on, gens, monde, peuple.

The English conjunctions "as," "since," "because," were often badly translated.

Too many marks were lost through sheer carelessness, as was shown in such errors as: vous soit, j'avait, son mère, il nous deman-  
dames.

French  
Composition,  
1922.

More attention should be given to the preparation of verb forms. Many errors were made even in the regular verbs.



The answer papers showed that the German texts had been carefully covered by both teachers and pupils. On the whole, the translations of the prepared passages were very good.

Many pupils failed to translate the modal adverbs, such as "ja" and "doch." Even when an attempt was made to translate them, the pupil did not always have a definite idea of the significance of these words.

In many cases there was a tendency to translate verb tenses too freely. "Strand-vögel, die ans Haff flogen" was translated "Shore-birds that had flown out to the bay," and "So war die Zeit meiner Abreise herangenah" was translated "So the time of my departure was approaching."

The plurals of nouns, and the tense forms of verbs were not well given. There seemed to be a good deal of doubt as to the position of the umlaut in such words as "Häuser" and "läuft." The forms of verbs with separable prefixes were often not known. "Hinaus fliegt" was frequently given, and even "vordringt" instead of "fliegt hinaus" and "dringt vor." The position of the reflexive in such sentences as "Er sieht sich um" was also very often wrong.

The German Grammar was carefully taught, as regards grammatical constructions and vocabulary. The continuous prose passages showed, in some cases, that the vocabulary of the Reader was not as carefully prepared as that of the Grammar.

More attention should be paid to the teaching of:

1. Syntax:

- (a) Position of verb in dependent clauses.
- (b) Position of infinitive.
- (c) Position of modal adverbs.
- (d) "Aber" as a connective.

2. Distinction in meaning between following groups of words:

- "lachen" and "lächeln."
- "treu" and "wahr."
- "kennen," "können" and "wissen."
- "hin" and "her."
- "weil" and "denn."
- "denn" and "dann."

3. Modal Verbs:

Compound tenses of modal verbs as in,—

"Die Zeit kann nicht so schnell vergangen sein."

- 4. The demonstrative pronoun "so." "Er schien es zu tun."
- 5. The relative and interrogative pronoun "who."

The authors have evidently been very thoroughly taught. The vocabularies of both the novel and the play have been learned with a completeness which is surprising. The difference between the good candidate and the poor one turns on the following points:

(1) Accuracy of observation, knowledge of whole phrases and of idiom, rather than of isolated words, and especially knowledge of exact idiom in the use of prepositions and of the use of words spelt somewhat alike, as "Ungar" and "Ungarn," "Römer," "Roman" and "Römisch," "einige" and "einzig," etc.



(2) Correct use of "wohnen" and "leben," "Abend" and "Nacht," "wissen" and "kennen," "all" and "ganz," "sagen" and "erzählen," "wollen" and "wünschen."

(3) On the other hand the papers showed that nearly all candidates should have had more practice in writing long sentences, sustained narrative, and continuous prose generally. Even the best papers have elementary mistakes in the order of clauses and of phrases containing infinitives with "zu."

TORONTO, January 15th, 1923.



